## **Source Water Assessment Report**



**Public Water Supply: RANDYS CLUB** 

# Assessment Areas Include: 835



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Reports were generated with the Automated Source Water Assessment Tool (ASWAT). Assessments were completed online using ASWAT by hundreds of state employees, public water supply staff, and technical assistant providers throughout the State of Kansas.

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## **Report Description**

#### **Detailed Explanation of Entire Report:**

The 1996 amendments to the Safe Drinking Water Act require each state to develop a Source Water Assessment Program (SWAP) and a Source Water Assessment (SWA) for each Public Water Supply (PWS) that treats and distributes raw source water. In Kansas there are 761 public water supplies that require SWAs. A SWA includes a delineation of the source water assessment area, an inventory of potential contaminant sources, and a susceptibility analysis.

A PWS can consist of one or more individual assessment areas that require different assessments. In general, an assessment area is delineated at a two-mile fixed radius for a groundwater well. A surface water intake assessment area is the upstream-drainage area (watershed), inside the state border. Additionally, an assessment area can consist of an individual well, group of wells, an individual surface water intake, or multiple surface water intakes.

After each assessment is completed a report is automatically generated using an Internet-based application called the Automated Source Water Assessment Tool (ASWAT). The individual assessment reports combine to form the entire SWA report for a PWS.

A map of each Assessment Area was also generated with ASWAT. However, for security reasons the maps are not included in this report. To obtain a copy of the map(s), please contact your local PWS.

All PWS reports will be available for viewing and downloading on KDHE's Watershed Management Section website(http://www.kdhe.state.ks.us/nps) in 2004.

### **RANDYS CLUB Summary:**

AA	Туре	Diversion Id
835	Ground water single well	001

Public Water Supply: RANDYS CLUB

Assessment Area: 835
Diversion Id's: 001

Status: Accepted

Submit Date: 2003–06–17 09:53:12

#### **Executive Summary:**

The Executive Summary gives the assessment area's Susceptibility Likelihood Score (SLS) for each contaminant of concern category.

SLS indicates which contaminant category is most likely to impact a given public water supply. Contaminants of concern for groundwater include microbiological, inorganic compounds, nitrates, synthetic organic compounds, pesticides, and volatile organic compounds. Contaminants of concern for surface water include microbiological, inorganic compounds, eutrophication – phosphorus, sedimentation, synthetic organic compounds, pesticides, and volatile organic compounds.

To determine the assessment area's susceptibility to contamination, a qualitative (semi-quantitative) screening level susceptibility analysis was designed that utilizes general assumptions and best professional judgement. It is a systematic procedure comprised of simple yes/no questions. Each question in the susceptibility analysis focuses on the presence or absence of potential pollution sources in the assessment area. SLS is most useful in helping the Public Water Supply (PWS) focus on water quality protection actions towards a contaminant category of concern. For example, if the SLS for microbiological contamination is high, relative to volatile organic compounds (VOC), water supply protection planners would conclude that the attention should be directed towards microbiological contaminant sources rather than VOC sources.

## **Executive Summary**

Public Water Supply: RANDYS CLUB

Assessment Area: 835

### **Susceptibility Likelihood Scores for Assessment Area**

Contaminant Category	A	В	B*	С	C*	D
Susceptibility Likelihood Score – SLS	66	63	64	64	65	63
SLS Range	Mid	Mid	Mid	Mid	Mid	Mid

A – Microbiolgical

**B\*** – Nitrates

C\* – Pesticides

**B** – Inorganic Compounds

C – Synthetic Organic Compounds

**D** – Volatile Organic Compounds

## Susceptibility Likelihood Range

SLS Range	
0-50	Low Susceptibility
51-80	<b>Moderate Susceptibility</b>
81–100	High Susceptibility

Public Water Supply: RANDYS CLUB

Assessment Area: 835
Diversion Id's: 001

Status: Accepted

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#### **Potential Sources:**

The Potential Sources section lists all the sites that have been identified as potential sources of contamination.

Potential sources of contamination may include land uses, industry, or businesses that could generate or store chemicals/substances that could potentially contaminate the water supply only if released into the environment. Both unregulated sites from business location databases and regulated sites from various KDHE databases were compiled. Additional sites could have been added by an evaluator through the assessment process to supplement the original data.

The 1987 Standard Industrial Classifications (SIC) were used to identify potential contaminate sites. The SIC system classifies establishments into industries on the basis of the primary activities of the establishment.

Each assessment area is delineated with 3 assessment zones. These zones can be used to get a general understanding of the potential influence sites have based on proximity to the water supply. Zone A is a 100-foot radius around a groundwater well and a 1000-foot radius around a surface water intake. Zone B is a 2000-foot radius around wells and a hydrological delineated buffer around the surface water sources. Zone C is a 2-mile radius around wells and the balance of the watershed for intakes. The potential sources listed in this section are sorted to show all the potential sources in Zone A first, Zone B second, and Zone C third.

Although a facility or business is identified in the study as a potential concern, it does not necessarily mean a release or spill has occurred. Contamination could only occur if certain chemical substances are released into the environment and filter into the water supply source.

The data for the potential sources of contamination was compiled from May through August in 2002. Some of the databases used were incomplete datasets that are continually being updated. Due to the incompleteness, inaccuracies, and new development, it is possible that sources of potential contamination that are in the assessment area are not included in the report. Inaccurate locations could also cause sources to show up in the assessment area that are not actually in the assessment. Additionally, duplication between the datasets could cause sites to show up multiple times in the assessment area.

## **Potential Sources**

Public Water Supply: RANDYS CLUB

Assessment Area: 835

Source No.	SIC Description	SIC ID	Zone
195097	Machinery, Except Electrical Manufacturing	3599	В
193123	Auto Truck Repair Service	7538	В
193119	Car Wash	7542	В
192578	General Farm, Primarily Crop	191	С
194770	Dairy Farms	241	С
192774	Veterinary Services, Specialties	742	С
195004	Veterinary Services, Specialties	742	С
192775	Animal Specialty Services	752	С
193650	Animal Specialty Services	752	С
193903	Animal Specialty Services	752	С
192583	Single–family Housing Construction	1521	С
192584	Single–family Housing Construction	1521	С
192585	Single–family Housing Construction	1521	С
192586	Single–family Housing Construction	1521	С
192651	Single–family Housing Construction	1521	С
192739	Single–family Housing Construction	1521	С
193009	Single-family Housing Construction	1521	С

Source No.	SIC Description	SIC ID	Zone
193085	Single–family Housing Construction	1521	С
193127	Single–family Housing Construction	1521	С
193260	Single–family Housing Construction	1521	С
193294	Single–family Housing Construction	1521	С
193354	Single–family Housing Construction	1521	С
193402	Single-family Housing Construction	1521	С
193403	Single–family Housing Construction	1521	С
193629	Single–family Housing Construction	1521	С
193636	Single–family Housing Construction	1521	С
193672	Single–family Housing Construction	1521	С
193769	Single–family Housing Construction	1521	С
193770	Single–family Housing Construction	1521	С
193996	Single–family Housing Construction	1521	С
194003	Single–family Housing Construction	1521	С
194783	Single-family Housing Construction	1521	С
194857	Single–family Housing Construction	1521	С
195005	Single–family Housing Construction	1521	С
192587	Nonresidential Construction	1542	С
192712	Nonresidential Construction	1542	С
193895	Nonresidential Construction	1542	С
194776	Nonresidential Construction	1542	С
192727	Highway and Street Construction	1611	С
192728	Highway and Street Construction	1611	С

Source No.	SIC Description	SIC ID	Zone
192743	Highway and Street Construction	1611	С
195003	Highway and Street Construction	1611	С
195104	Highway and Street Construction	1611	С
192807	Bridge Construction	1622	С
192857	Wrecking and Demolition Work, Construction Demolition Landfill	1795	С
193630	Meat Packing Plant Manufacturing	2011	С
193429	Flour Mill and Other Food Grain Milling	2041	С
195102	Animal and Marine Fats and Oils Manufacturing	2077	С
192758	Bottled and Canned Soft Drinks Production	2086	С
192946	Wood Kitchen Cabinets Manufacturing	2434	С
192729	Wood Office Furniture Manufacturing	2521	С
192723	Drapery Hardware and Blinds and Shades Manufacturing	2591	С
193753	Newspapers Publishing and Printing	2711	С
193663	Commercial Printing-Lithographic	2752	С
193664	Commercial Printing-Lithographic	2752	С
193668	Commercial Printing-Lithographic	2752	С
193708	Commercial Printing-Lithographic	2752	С
193790	Commercial Printing-Lithographic	2752	С

Source No.	SIC Description	SIC ID	Zone
194817	Commercial Printing-Lithographic	2752	С
192854	Commercial Printing NEC	2759	С
193421	Commercial Printing NEC	2759	С
193426	Commercial Printing NEC	2759	С
193709	Commercial Printing NEC	2759	С
194041	Commercial Printing NEC	2759	С
192959	Plastics Materials and Resins Manufacturing	2821	С
193080	Plastics products Manufacturing	3089	С
193110	Concrete Products Manufacturing	3272	С
192849	Sheet Metal Work Manufacturing	3444	С
192777	Conveyors and Conveying Equipment Manufacturing	3535	С
192769	Switchgear and Switchboard Apparatus Manufacturing	3613	С
194807	Travel trailers and Campers Manufacturing	3792	С
192750	Signs and Advertising Display Manufacturing	3993	С
193355	Signs and Advertising Display Manufacturing	3993	С
193372	Signs and Advertising Display Manufacturing	3993	С

Source No.	SIC Description	SIC ID	Zone
193897	Signs and Advertising Display Manufacturing	3993	С
192598	Local Trucking, without Storage	4212	С
192726	Local Trucking, without Storage	4212	С
192960	Farm Product Warehousing and Storage	4221	С
193645	Refuse Systems	4953	С
193423	Recreational vehicle sales and repair	5012	С
194825	Recreational vehicle sales and repair	5012	С
192749	Construction and Mining Machinery	5082	С
192797	Construction and Mining Machinery	5082	С
192798	Construction and Mining Machinery	5082	С
192834	Scrap and Waste Materials	5093	С
194771	Scrap and Waste Materials	5093	С
195082	Scrap and Waste Materials	5093	С
193252	Gasoline Service Station	5541	С
193782	Gasoline Service Station	5541	С
193851	Gasoline Service Station	5541	С
193860	Gasoline Service Station	5541	С
193932	Gasoline Service Station	5541	С
193939	Gasoline Service Station	5541	С
192616	Mobile Home Park	6515	С
192776	Mobile Home Park	6515	С
193957	Mobile Home Park	6515	С

Source No.	SIC Description	SIC ID	Zone
194221	Mobile Home Park	6515	С
192789	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	С
192836	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	С
192837	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	С
192885	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	С
192921	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	С
193071	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	С
193305	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	С
193313	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	С
193418	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	С
194784	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	С
194921	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	С

Source No.	SIC Description	SIC ID	Zone
192574	Auto Truck Repair Service	7538	С
192697	Auto Truck Repair Service	7538	С
192718	Auto Truck Repair Service	7538	С
192719	Auto Truck Repair Service	7538	С
192720	Auto Truck Repair Service	7538	С
192721	Auto Truck Repair Service	7538	С
192734	Auto Truck Repair Service	7538	С
192751	Auto Truck Repair Service	7538	С
192766	Auto Truck Repair Service	7538	С
192781	Auto Truck Repair Service	7538	С
192796	Auto Truck Repair Service	7538	С
192801	Auto Truck Repair Service	7538	С
192802	Auto Truck Repair Service	7538	С
192823	Auto Truck Repair Service	7538	С
192831	Auto Truck Repair Service	7538	С
192838	Auto Truck Repair Service	7538	С
192847	Auto Truck Repair Service	7538	С
192850	Auto Truck Repair Service	7538	С
192956	Auto Truck Repair Service	7538	С
193337	Auto Truck Repair Service	7538	С
193775	Auto Truck Repair Service	7538	С
194779	Auto Truck Repair Service	7538	С
194792	Auto Truck Repair Service	7538	С

Source No.	SIC Description	SIC ID	Zone
194805	Auto Truck Repair Service	7538	С
194810	Auto Truck Repair Service	7538	С
194822	Auto Truck Repair Service	7538	С
194915	Auto Truck Repair Service	7538	С
195011	Auto Truck Repair Service	7538	С
195012	Auto Truck Repair Service	7538	С
195045	Auto Truck Repair Service	7538	С
195046	Auto Truck Repair Service	7538	С
195050	Auto Truck Repair Service	7538	С
192704	Car Wash	7542	С
192832	Car Wash	7542	С
193457	Car Wash	7542	С
193861	Car Wash	7542	С
193874	Car Wash	7542	С
192628	Repair Services, Nec	7699	С
192735	Repair Services, Nec	7699	С
192765	Repair Services, Nec	7699	С
193088	Repair Services, Nec	7699	С
193101	Repair Services, Nec	7699	С
193275	Repair Services, Nec	7699	С
193314	Repair Services, Nec	7699	С
193979	Repair Services, Nec	7699	С
194916	Repair Services, Nec	7699	С

Source No.	SIC Description	SIC ID	Zone
194931	Repair Services, Nec	7699	С

#### **Regulated Confined Animal Feeding Operations Potential Site Sources**

Source No.	Source Name	ID/Permit No.	Zone
2002739	Farmers Ranchers Livestock	A-SASA-C003	С

### **Regulated Hazardous Waste Potential Site Sources**

Did Not Contain Any Of These Potential Site Sources

Source No.	Source Name	ID/Permit No.	Zone
3001949	Salina Transit	27591	В
3002539	Turbine Specialties, Salina	80305	В
3000006	Grease Monkey Of Salina	00018	С
3000010	This That Lamps Shades	00037	С
3000033	Us Postal Serv, Salina	00156	С
3000054	Coastal Mart #2520	00312	C

Source No.	Source Name	ID/Permit No.	Zone
3000086	Kerr–mcgee #6705	01047	С
3000404	Pepsi Cola Bottling	04988	С
3000416	Salina West Auto Truck Center	05092	С
3000446	Payne Oil Co	05518	С
3000455	Farmers Coop Assn	05618	С
3000473	Usd 305, Salina, Maintenance	05878	С
3000506	Asbury Hospital	06134	С
3000534	Salina Reg Hlth Ctr	06264	С
3000542	Bennett Autoplex, Former Bengstons	06304	С
3000543	Steves Service, Salina	06306	С
3000545	Moody Service	06317	С
3000598	Wonder Bread	06525	С
3000687	Ryder Truck Rental, Salina	06877	С
3000697	Town Country #41	06977	С
3000721	Ashton's East	07063	С
3000796	Saline Co/city Bldg Auth	07897	С
3000860	Sinclair Station	08804	С
3000867	Sw Bell Telephone, Salina	08829	С
3000899	Salina, Central Garage	09067	С
3000900	Salina, Fire Station 1	09068	С
3000901	Saline Co Jail	09070	С
3000902	Oakdale Park Shop	09071	С
3001128	Long Mcarthur Ford	17230	С

Source No.	Source Name	ID/Permit No.	Zone
3001157	Ott Oil Co	18426	С
3001159	Food Services Of America	18477	С
3001462	Pit Stop 66	25445	С
3001463	Frank's 66 (cunningham)	25446	С
3001484	Cruce Produce	25544	С
3001519	Rounds And Porter	25738	С
3001532	Dels Alternater	25779	С
3001533	Conoco, Midway Usa	25780	С
3001534	Amoco, W Crawford	25781	С
3001582	Brown Welding Supply	26021	С
3001626	Diamond Transfer	26189	С
3001742	Kdot, Salina	26673	С
3001815	Ups, Salina	27047	С
3001821	Uprr, Salina	27064	С
3001825	Sears Service Center	27079	С
3001832	Saline Valley Terminal	27088	С
3001851	Power Vac	27157	С
3001908	National Guard Armory	27440	С
3001930	Mccord Tire Co	27516	С
3001948	Salina Tree Inc	27588	С
3002006	Weis American	28043	С
3002009	Frontier Tire Auto	28048	С
3002064	Self Images Beauty Shop	28350	С

Source No.	Source Name	ID/Permit No.	Zone
3002065	Carol Lee Donuts	28352	С
3002165	Ranger's Steakhouse	28909	С
3002185	Rainbo Bread Store	29016	С
3002234	Pump Mart	29269	С
3002328	Wilson Constructors Warehouse	29688	С
3002348	Hawk Vending/uprr	29765	С
3002349	Uprr, Salina	29766	С
3002358	Watson Auto Body Works	29807	С
3002460	Koch Materials, Asphalt Plant	70011	С
3002530	Moss Sales	80294	С
3002531	Payne Oil	80295	С
3002532	Pennington Chiropractic Center, Salina	80296	С
3002533	Quality Detail Shop	80297	С
3002535	Horton, Thelma	80299	С
3002536	Sharp Auto Sales	80300	С
3002537	Sign Shop	80301	С
3002538	Sparkle Car Wash	80304	С
3002540	Walthens Oil	80306	С
3002542	Ross, Woodrow	80308	С
3002549	A D M Milling Co	80334	С
3002550	Koetting, B J	80335	С
3002551	Brown Industries	80336	С
3002552	Bud's Plumbing	80337	С

Source No.	Source Name	ID/Permit No.	Zone
3002554	Salina, Water Plant	80339	С
3002557	Firestone Service	80342	С
3002561	Kdot Distr 2, Salina	80347	С
3002740	Images Inc	81389	С
3002754	Holiday Conoco (former)	81428	С
3002774	Richardson Storage	81473	С
3002784	Hardee's Restaurant	81495	С
3002823	Bus Depot, Former (vanier)	81618	С
3002871	Usd 305, Central High School	81772	С

### **Regulated Identified Contaminated Potential Site Sources**

Source No.	Source Name	ID/Permit No.	Zone
7000848	TURBINE SPECIALTIES, INC.	C508570051	В
7000837	WATER TREATMENT PLANT (WTP) – SALINA	C508500037	С
7000841	SALINA PWS WELL #11	C508503004	С
7000843	SALINA NORTH	C508503010	С
7000844	SALINA NORTH	C508503010	С
7000847	FMGP – SALINA	C508570037	С
7000853	WEST SOUTH STREET	C508570204	С
7000854	EXPRESS CLEANERS	C508570354	С
7000858	ELM FRONT STREETS	C508570919	С

## **Regulated Identified Contaminated Potential Site Sources**

Source No.	Source Name	ID/Permit No.	Zone
7000859	LINCOLN AVE 8TH STREET	C508571100	С
7000971	SALINA – PINE 7TH	C508571572	С

### **Regulated Solid Waste Potential Site Sources**

Source No.	Source Name	ID/Permit No.	Zone
5000517	Albers Construction Co.	0501-S	С

### **Regulated Waste Water Potential Site Sources**

Source No.	Source Name	ID/Permit No.	Zone
6000213	REMA BAKEWARE	I-SH33-CO06	C

Public Water Supply: RANDYS CLUB

Assessment Area: 835
Diversion Id's: 001

Status: Accepted

Submit Date: 2003-06-17 09:53:12

#### **Added Sources:**

The Added Sources section lists all the sites that have been added as potential sources of contamination by an evaluator through the assessment process to supplement the original data.

The potential sources listed in this section are sorted to show the added potential sources in Zone A first, Zone B second, and Zone C third.

Although a facility or business was added as a potential concern, it does not necessarily mean a release or spill has occurred. Contamination could only occur if certain chemical substances are released into the environment and filter into the water supply source.

## **Added Sources**

Public Water Supply: RANDYS CLUB

Assessment Area: 835

#### **Added Potential Site Sources**

Source No.	Source Name	SIC ID	Zone
9000096	City of Salina	4953	С

Public Water Supply: RANDYS CLUB

Assessment Area: 835
Diversion Id's: 001

Status: **Accepted** 

Submit Date: 2003–06–17 09:53:12

#### **Potential Contaminants Summary:**

The Contaminants Summary shows the number of identified unregulated sources in the assessment area for each contaminant of concern category.

In order to obtain the number or sources for each category, a relationship was correlated between each Standard Industrial Classification (SIC) and the contaminant of concern categories. Each SIC was assessed and associated with contaminant categories. For example, if not managed properly, a car wash (SIC 7542) could potentially contaminate an intake because of inorganic compounds (IOC) and volatile organic compounds (VOC); thus, a car wash is associated with IOCs and VOCs.

A chart displays a count for each contaminant category. The sum for each category represents the total number of identified sources that have been associated with that particular contaminant category. However, the total number of identified sources does not include contaminants from the Added Sources. In our example, a car wash would be considered 2 sources of contamination. It would be a potential source of contamination for IOCs and for VOCs; thus, 1 would be added to the total number of sources in the VOC category and 1 would be added to the IOC category.

# **Potential Contaminants Summary**

Public Water Supply: RANDYS CLUB

Assessment Area: 835

# **Number of Unregulated Site Sources Identified for each Contaminant Category**

MicroBiological	Pesticides	IOC's	SOC's	VOC's	Nitrates
39	2	111	37	85	35

A – Microbiolgical

**B\*** – Nitrates

C\* – Pesticides

**B** – Inorganic Compounds

C – Synthetic Organic Compounds

**D** – Volatile Organic Compounds

Public Water Supply: RANDYS CLUB

Assessment Area: 835
Diversion Id's: 001

Status: **Accepted** 

Submit Date: 2003–06–17 09:53:12

#### **Potential Contaminants Listing:**

The Potential Contaminants section lists the contaminant of concern category associated with each Standard Industrial Classification (SIC) found in an assessment area. A complete list of contaminant category codes are located at the bottom of this page.

The relationships defined between the Standard Industrial Classifications (SIC) and the contaminant of concern categories are displayed in a table format. Using our car wash example, the relationships can be better illustrated. A car wash could release IOC and VOC chemical substances. The connection is shown by indicating the SIC, 7542, and the associated contaminant categories, IOC (Category B) and VOC (Category D). However, the contaminants listed are not associated with any Added Sources.

The list is sorted by the SIC source description and it only shows unique SIC sources. For example, an assessment area can have 20 car washes in an assessment area, but the list is only going to show contaminant categories associated with car washes onetime. This is because all car washes have the same SIC and every car wash poses the same potential threat to water intakes.

A – Microbiolgical B – Inorganic Compounds
 B2 – Sedimentation B\* – Nitrates
 B1 – Eutrophication – Phosphorous
 C – Synthetic Organic Compounds

**C\*** – Pesticides **D** – Volatile Organic Compounds

# **Potential Contaminants Listing**

Public Water Supply: RANDYS CLUB

Assessment Area: 835

SIC ID	SIC Source	Potential Contaminant	Contaminant Category
2077	Animal and Marine Fats and Oils Manufacturing	BOD, oil and grease, TSS	A
"	"	"	В
7538	Auto Truck Repair Service	Inorganics, VOCs	В
"	"	"	D
2086	Bottled and Canned Soft Drinks Production	BOD	A
1622	Bridge Construction	Sedimentation	B2
7542	Car Wash	Inorganics, VOCs	В
"	"	"	B1
"	"	"	B2
"	"	"	D
3272	Concrete Products Manufacturing	Minerals and TSS	В
5082	Construction and Mining Machinery	NA	NA
3535	Conveyors and Conveying Equipment Manufacturing	inorganics, VOCs	В
"	"	"	D
2591	Drapery Hardware and Blinds and Shades Manufacturing	VOCs	D
2041	Flour Mill and Other Food Grain Milling	BOD, TSS	A
"	"	"	В

SIC ID	SIC Source	Potential Contaminant	Contaminant Category
5541	Gasoline Service Station	Inorganics, VOCs	В
"	"	"	D
1611	Highway and Street Construction	Sedimentation	B2
4212	Local Trucking, without Storage	VOCs	D
3599	Machinery, Except Electrical Manufacturing	inorganics, VOCs	В
"	"	"	D
2011	Meat Packing Plant Manufacturing	BOD, pathogens, Oil and grease	A
"	"	"	B*
6515	Mobile Home Park	Sanitary wastes, Fertilizers	A
"	"	"	В
"	"	"	B1
"	"	"	B*
1542	Nonresidential Construction	Sedimentation	B2
2821	Plastics Materials and Resins Manufacturing	Solvents, plasticizers, VOCs	D
3089	Plastics products Manufacturing	inorganics, VOCs	В
"	"	"	D
5093	Scrap and Waste Materials	Metals, TSS	В
3444	Sheet Metal Work Manufacturing	Metals and TSS, VOCs and metal etch	В
3993	Signs and Advertising Display Manufacturing	inorganics, VOCs	В

SIC ID	SIC Source	Potential Contaminant	Contaminant Category
3993	Signs and Advertising Display Manufacturing	inorganics, VOCs	D
1521	Single–family Housing Construction	Oil, Paint, Pesticides, Fertilizers	A
"	"	"	B1
"	"	"	B2
"	"	"	B*
"	"	"	С
3613	Switchgear and Switchboard Apparatus Manufacturing	inorganics, VOCs	В
"	"	"	D
7532	Top, Body, and Upholstery Repair Shops and Paint Shops	Inorganics, VOCs	В
"	"	"	D
3792	Travel trailers and Campers Manufacturing	inorganics, VOCs	В
"	"	"	D
742	Veterinary Services, Specialties	Sanitary, Inorganics TSS	A
"	"	"	В
2434	Wood Kitchen Cabinets Manufacturing	TSS, VOCs	В
"	"	"	D
2521	Wood Office Furniture Manufacturing	TSS, VOCs	В
"	"	"	D
1795	Wrecking and Demolition Work, Construction Demolition Landfill	TSS, could contain metals	B1

SIC ID	SIC Source	Potential Contaminant	Contaminant Category
1795	Wrecking and Demolition Work, Construction Demolition Landfill	TSS, could contain metals	B2
752	Animal Specialty Services	Sanitary, fertilizers	A
"	"	"	В
"	"	"	B1
"	"	"	B2
"	"	"	B*
2759	Commercial Printing NEC	Inorganics, VOCs, Semi volatiles	В
"	"	"	С
"	"	"	D
2752	Commercial Printing–Lithographic	Inorganics, VOCs, Semi volatiles	В
"	"	"	С
"	"	"	D
241	Dairy Farms	Sanitary, fertilizers	A
"	"	"	В
"	"	"	B1
"	"	"	B2
"	"	"	B*
4221	Farm Product Warehousing and Storage	TSS, VOCs	В
"	"	"	D

SIC ID	SIC Source	Potential Contaminant	<b>Contaminant Category</b>
191	General Farm, Primarily Crop	fertilizers, Pesticides	В
"	"	"	B1
"	"	"	B2
"	"	"	B*
"	"	"	C*
2711	Newspapers Publishing and Printing	Inorganics, VOCs, Semi volatiles	В
"	"	"	С
"	"	"	D
5012	Recreational vehicle sales and repair	Inorganics	В
4953	Refuse Systems	ALL	A
"	"	"	В
"	"	"	B1
"	"	"	B2
"	"	"	B*
"	"	"	С
"	"	"	C*
"	"	"	D
7699	Repair Services, Nec	inorganics	В

Public Water Supply: RANDYS CLUB

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#### **Protection Measures:**

The Protection Measures section shows water quality protection measures for the Standard Industrial Classifications (SIC) identified in the assessment area.

Previous sections of this report are designed to show areas that Public Water Supplies (PWS) can focus on to improve the susceptibility of an assessment area. This section helps identify water quality protection measures that a PWS can use as guidance for implementing action for a potential contaminant site in the assessment area. It focuses on protection measures that can reduce the risk of contamination to the water supply.

This portion of the report only displays water quality protection measures for each type of SIC found in the assessment area. It does not display protection measures for each site in the assessment area because every SIC should have the same or similar water quality protection management practices. However, the protection measures listed are not associated with any Added Sources.

## **Protection Measures**

Public Water Supply: RANDYS CLUB

Assessment Area: 835

SIC	SIC Source	Contaminant Source	Water Quality Protection Measure	Regulatory Authority
2077	Animal and Marine Fats and Oils Manufacturing	BOD, oil and grease, TSS	Wastewater pretreatment and/or discharge to a POTW. Grounds maintenance and cleanup. Fat traps on sewer lines.	40 CFR 122 and State or federal Storm water pollution prevention regulations
7538	Auto Truck Repair Service	Inorganics, VOCs	Discharge to POTW. Manage oil products and used oil so that it is not in contact with water	40 CFR 442 and
2086	Bottled and Canned Soft Drinks Production	BOD	Wastewater pretreatment and/or discharge to a POTW.	40 CFR 407 and State or federal Storm water pollution prevention regulations
1622	Bridge Construction	Sedimentation	Erosion and Sediment Control	KAR 28–16, KDHE
7542	Car Wash	Inorganics, VOCs	Install and maintain sediment and grease traps where appropriate	40 CFR 442
3272	Concrete Products Manufacturing	Minerals and TSS	Minimize outdoor storage and control storm water runoff.	State or federal Storm water pollution prevention regulations

SIC	SIC Source	Contaminant Source	Water Quality Protection Measure	Regulatory Authority
5082	Construction and Mining Machinery	NA	Discharge to POTW	NA
3535	Conveyors and Conveying Equipment Manufacturing	inorganics, VOCs	Manage wastes properly and treat process wastewater prior to discharge to a POTW or direct	State or federal Storm water pollution prevention regulations
2591	Drapery Hardware and Blinds and Shades Manufacturing	VOCs	Discharge of process waters to POTW.	State or federal Storm water pollution prevention regulations
2041	Flour Mill and Other Food Grain Milling	BOD, TSS	Wastewater pretreatment and/or discharge to a POTW	40 CFR 122 and State or federal Storm water pollution prevention regulations
5541	Gasoline Service Station	Inorganics, VOCs	Maintain area to minimize fuel contamination	NA
1611	Highway and Street Construction	Sedimentation	Erosion and Sediment Control	KAR 28–16, KDHE

SIC	SIC Source	Contaminant Source	Water Quality Protection Measure	Regulatory Authority
4212	Local Trucking, without Storage	VOCs	Discharge to a POTW	State or federal Storm water pollution prevention regulations
3599	Machinery, Except Electrical Manufacturing	inorganics, VOCs	Manage wastes properly and treat process wastewater prior to discharge to a POTW or direct	State or federal Storm water pollution prevention regulations
2011	Meat Packing Plant Manufacturing	BOD, pathogens, Oil and grease	Wastewater pretreatment and/or discharge to a POTW	40CFR 432 and State or federal Storm water pollution prevention regulations
6515	Mobile Home Park	Sanitary wastes, Fertilizers	Discharge to POTW. Minimize use of lawn chemicals	KAR 28–5
1542	Nonresidential Construction	Sedimentation	Erosion and Sediment Control	KAR 28–16, KDHE
2821	Plastics Materials and Resins Manufacturing	Solvents, plasticizers, VOCs	Discharge process water to POTW	40 CFR 424 and State or federal Storm water pollution prevention regulations

SIC	SIC Source	Contaminant Source	Water Quality Protection Measure	Regulatory Authority
3089	Plastics products Manufacturing	inorganics, VOCs	Pre-treat wastewater prior to discharge. Minimize outdoor storage and control storm water runoff.	40 CFR 463 and State or federal Storm water pollution prevention regulations
5093	Scrap and Waste Materials	Metals, TSS	Minimize contact with storm water	State or federal Storm water pollution prevention regulations
3444	Sheet Metal Work Manufacturing	Metals and TSS, VOCs and metal etch	Minimize outdoor storage and control storm water runoff. Pre–treat process wastewater prior to discharge to POTW	40 CFR 464 and State or federal Storm water pollution prevention regulations
3993	Signs and Advertising Display Manufacturing	inorganics, VOCs	Manage wastes properly and treat process wastewater prior to discharge to a POTW or direct	40 CFR 459 and State or federal Storm water pollution prevention regulations
1521	Single–family Housing Construction	Oil, Paint, Pesticides, Fertilizers	Proper cleaning and disposal of household hazardous waste. Proper storage, application, and clean up of pesticides and fertilizers	KAR 28–48, KDHE, KDEM
3613	Switchgear and Switchboard Apparatus Manufacturing	inorganics, VOCs	Manage wastes properly and treat process wastewater prior to discharge to a POTW or direct	State or federal Storm water pollution prevention regulations

SIC	SIC Source	Contaminant Source	Water Quality Protection Measure	Regulatory Authority
7532	Top, Body, and Upholstery Repair Shops and Paint Shops	Inorganics, VOCs	Discharge to POTW. Recycle where appropriate. Properly maintain oil product and waste. Manage paint and solvent wastes properly	NA
3792	Travel trailers and Campers Manufacturing	inorganics, VOCs	Manage wastes properly and treat process wastewater prior to discharge to a POTW or direct	State or federal Storm water pollution prevention regulations
742	Veterinary Services, Specialties	Sanitary, Inorganics TSS	Discharge to POT	NA
2434	Wood Kitchen Cabinets Manufacturing	TSS, VOCs	Discharge of process waters to POTW. Minimize outdoor storage.	State or federal Storm water pollution prevention regulations
2521	Wood Office Furniture Manufacturing	TSS, VOCs	Discharge of process waters to POTW.	State or federal Storm water pollution prevention regulations
1795	Wrecking and Demolition Work, Construction Demolition Landfill	TSS, could contain metals	Erosion control and proper waste management, Proper cover and runoff containment for the fill area	40CFR Part 122 Storm Water Construction Permitting and KDHE Storm Water Pollution Prevention Rules, 40 CFR 445 and Solid Waste Permitting rules, Storm Water Permitting rules, Storm

### **Recommended Water Quality Protection Measures**

SIC	SIC Source	Contaminant Source	Water Quality Protection Measure	Regulatory Authority	
752	Animal Specialty Services	Sanitary, fertilizers	Collect and treat wastes.	NA	
2759	Commercial Printing NEC	Inorganics, VOCs, Semi volatiles	Recycle chemicals where possible. Discharge to POTW	40 CFR 459 and State or federal Storm water pollution prevention regulations	
2752	Commercial Printing–Lithographic	Inorganics, VOCs, Semi volatiles	Recycle chemicals where possible. Discharge to POTW	40 CFR 459 and State or federal Storm water pollution prevention regulations	
241	Dairy Farms	Sanitary, fertilizers	Collect and treat process wastes. Use good erosion control practices. Minimize storm water contact with contaminants.	40 CFR 405	
4221	Farm Product Warehousing and Storage TSS, VOCs		Keep the area clean of grain. Use grease traps.	State or federal Storm water pollution prevention regulations	
General Farm, Primarily Crop		fertilizers, Pesticides	Maintain good erosion control practices and minimize the use of chemicals	NA	

### **Recommended Water Quality Protection Measures**

SIC	SIC Source	Contaminant Source	Water Quality Protection Measure	Regulatory Authority		
2711	Newspapers Publishing and Printing	Inorganics, VOCs, Semi volatiles  Recycle chemicals where possible. Discharge to POTW  I		40 CFR 459 and State or federal Storm water pollution prevention regulations		
5012	Recreational vehicle sales and repair	Inorganics	Discharge to a POTW. Store oils and lubricants properly	NA		
4953	Refuse Systems	ALL	Store wastes properly in order to minimize contact with storm water.	Maintain the lagoon or storage vessel properly. Control storm water run on and runoff to minimize contamination of storm water		
7699	Repair Services, Nec	inorganics	Discharge to POTW	NA		

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#### **Assessment Analysis:**

The Assessment Analysis section displays the numbers assigned to each contaminant of concern category for each question in the susceptibility analysis.

This analysis is based on a decision tree framework consisting of a series of yes/no questions. These questions consider the proximity of contaminant sources to the water supply intake, the type of contaminant, and the application of pollution prevention or water quality protection practices to sources of contamination. As the evaluator moves through the analytical framework, susceptibility points are accumulated based on the presence of contaminant sources in the assessment area.

After all the questions have been answered, the SLS is calculated for each contaminant of concern category. The SLS is determined by counting the number of contamination risk factors found to occur in the delineated assessment area and applying a multiplier to this number. Because the number of contaminant category risk factors is not equal, the multiplier is used to establish a common scale for the SLS of each contaminant category.

## **Assessment Analysis**

Public Water Supply: RANDYS CLUB

Assessment Area: 835

### **Ground Water Single Well Analysis**

 ${\bf A}$  – Microbiolgical  ${\bf B}$  – Inorganic Compounds

 ${f B^*}$  – Nitrates  ${f C}$  – Synthetic Organic Compounds  ${f C^*}$  – Pesticides  ${f D}$  – Volatile Organic Compounds

No.	Question	Response	A	В	<b>B</b> *	C	<b>C</b> *	D
1	Is the well under the influence of surface water?			0	0	0	0	0
2	Does the well meet KS water well construction standards?	Yes	0	0	0	0	0	0
3	Is the depth of the well less than 30 feet?	No	0	0	0	0	0	0
4	Are there unplugged, abandoned water wells present in Zone A?	Yes	1	1	1	1	1	1
5	Is there gravel pack within 20 feet of the surface?	No	0	0	0	0	0	0
6	Does a PWS own or control Zone A?	No	1	1	1	1	1	1
7	Does Zone A consist entirely of native grass?		1	1	1	1	1	1
8	Is there a contaminated well in the Zone A?		1	1	1	1	1	1
9	Is a class V UIC well present?		0	0	0	0	0	0
10	Are any commercial, industrial, or urban areas present in Zone B?		1	1	1	1	1	1
11	Does each industrial/commercial site and urban area have a water quality protection plan in place?		1	1	1	1	1	1
12	Are any non-farm home sites present in Zone B?		1	0	1	0	1	0
13	Do all the non-farm home sites have a water quality protection plan?		1	0	1	0	1	0
14	Are any farmsteads present in Zone B?		1	1	1	1	1	1
15	Do all farmsteads have a water quality protection plan?		1	1	1	1	1	1
16	Does Zone B consist entirely of native grass?		1	1	1	1	1	1
17	Is there grazing livestock in Zone B?	No	0	0	0	0	0	0

No.	Question	Response	A	В	<b>B</b> *	C	C*	$ \mathbf{D} $
18	Do all the livestock producers have water quality protection measures in place?	Yes	0	0	0	0	0	0
19	Is there livestock confinement in Zone B?	Yes	1	1	1	0	1	0
20	Is each confined animal feeding operation registered with KDHE?	Yes	0	0	0	0	0	0
21	Is there corn or grain sorghum production in Zone B?	Yes	0	0	1	0	1	0
22	Are corn/grain sorghum nutrient and pesticide management plans in use for each site?	No	0	0	1	0	1	0
23	Are any orchards present in Zone B?	No	0	0	0	0	0	0
24	Are orchard nutrient and pesticide plans in use for each site?	Yes	0	0	0	0	0	0
25	Are there unsewered developments (concentrations of lagoons or septic systems) present in Zone B?		1	1	1	0	0	0
26	Is there a railroad or major highway in Zone B or C?	Yes	0	1	1	1	1	1
27	Is there oil production in Zone B or C?		0	0	0	0	0	0
28	Do coarse textured soils predominate Zones A, B and C?		0	0	0	0	0	0
29	Is an irrigation well located in Zone B or C?		0	0	0	0	0	0
30	Is a wastewater treatment facility in Zone B or C?		0	0	0	0	0	0
31	Is a solid waste landfill in Zone B or C?		1	1	1	1	1	1
32	Are there unplugged, abandoned water wells present in Zone B or C?		1	0	0	0	0	0
33	Are any commercial, industrial, or urban areas present in Zone C?	Yes	1	1	1	1	1	1
34	Are water quality protection plans in use for each site/area?	No	1	1	1	1	1	1
35	Is there livestock confinement in Zone C?	Yes	1	1	1	1	1	0
36	Is each confined livestock facility registered with KDHE?		0	0	0	0	0	0
37	Do all the livestock producers have water quality protection measures in place?		1	0	1	0	0	0
38	Are cropland nutrient management plans in place?		0	0	1	0	0	0
39	Are cropland pesticide management plans in place?		0	0	0	0	1	0
40	Does a perennial stream flow into Zone C?		1	1	1	1	1	1
41	Are watershed water quality protection plans in place?	No	1	1	1	1	1	1

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#### **Site Comments:**

The Site Comments section lists all the comments that were added for the potential sources of contamination found in the assessment area.

Local comments and feedback from people that are familiar with the assessment area is an important aspect of the assessment. The comments greatly improve the assessment by adding detail to the sites that can be referenced for more information.

This local information may include comments on potential contamination threats (or lack there of), local water quality protection initiatives, etc. Adding comments are optional and are mainly focused on sources in areas that could have the greatest impact on water supply if a spill or release occurred in the environment. It is left to the discretion of the PWS and/or source water assessment committee to add comments.

## **Site Comments**

	Did Not Receive Any Comments
Comments for R	egulated Confined Animal Feeding Operations Sites
	Did Not Receive Any Comments
Comments for R	egulated Hazardous Waste Sites
	Did Not Receive Any Comments
Comments for R	egulated Leaking Storage Tank Sites  Did Not Receive Any Comments
	egulated Leaking Storage Tank Sites
	egulated Leaking Storage Tank Sites  Did Not Receive Any Comments
Comments for R	egulated Leaking Storage Tank Sites  Did Not Receive Any Comments  egulated Identified Contaminated Sites  Did Not Receive Any Comments
Comments for R	egulated Leaking Storage Tank Sites  Did Not Receive Any Comments  egulated Identified Contaminated Sites

### **Comments for Regulated Waste Water Sites**

Potential Contaminant Site Name	Site No.	Site Comments	Author
REMA BAKEWARE	6000213	Facility in now medical clinic	James Wendell

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#### **Added Site Comments:**

The Added Site Comments section lists the comments for why sites were added as a potential source of contamination found to the assessment area.

## **Added Site Comments**

Public Water Supply: RANDYS CLUB

Assessment Area: 835

### **Comments for Added Contaminant Sites**

Added Contaminant Site Name	Site No.	Site Comments	Author
City of Salina	9000096	INot on existing list	James Wendell
City of Salina	9000096	Not on existing list.	James Wendell
City of Salina	9000096	This is a Household Hazardous Waste Site.	James Wendell

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### **Analysis Question Comments:**

The Analysis Question Comments section lists all the comments that were added during analysis portion of the assessment, in which a series of yes/no questions were asked.

Evaluators have the option to add comments to questions to clarify why a response was given or to give more details to a question. Local comments and feedback from people that are familiar with the assessment area is an important aspect of the assessment. The comments greatly improve the assessment by adding clarification and details that could not be identified with a simple yes or no response.

# **Analysis Question Comments**

Public Water Supply: RANDYS CLUB

Assessment Area: 835

### **Comments for Analysis Questions**

Analysis Question	Question Comments	Author		
Did Not Receive Any Comments				